

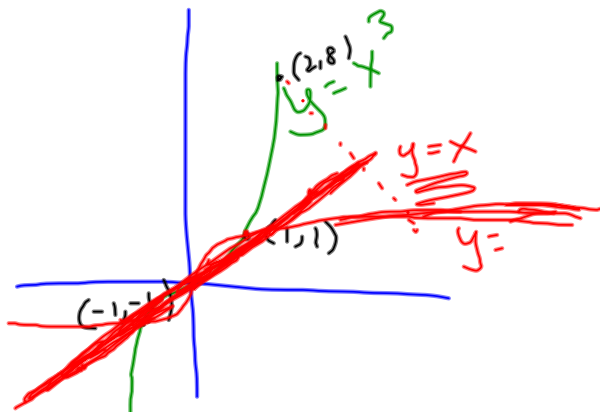
| x | :

MATH \Rightarrow ENTER

X
)

will look like ABS(x)

3.6) Inverses



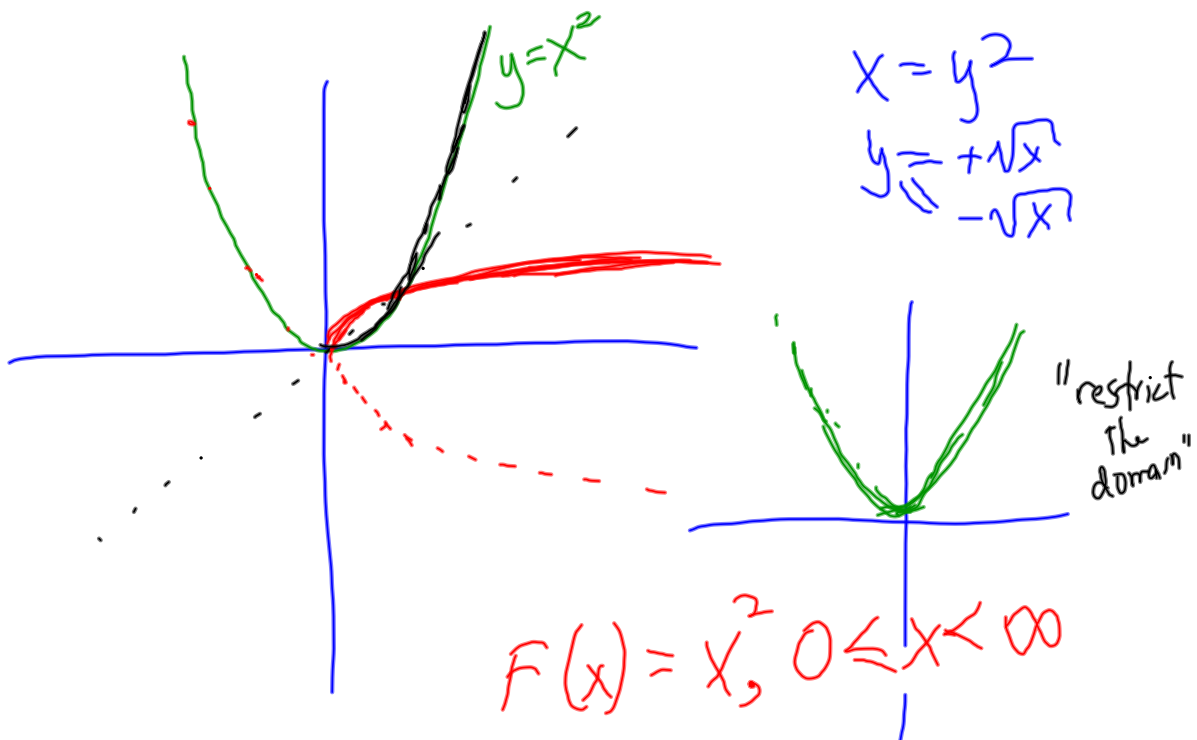
eqⁿ of the "function"
where the x-coord &
y-coord are
same.

$$\boxed{y = x}$$

$y = x^3$	$y = \sqrt[3]{x}$
$(0, 0)$	$(0, 0)$
$(1, 1)$	$(1, 1)$
$(-1, -1)$	$(-1, -1)$
$(2, 8)$	$(8, 2)$

$$x = y^3$$

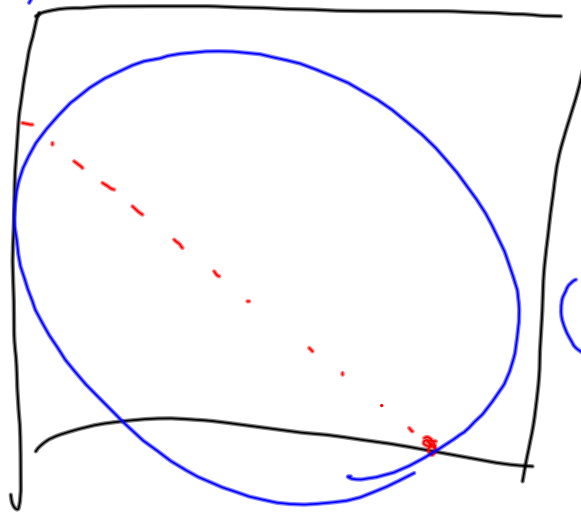
$$\sqrt[3]{x} = y$$



	Domain	Range
orig		
inv		

$y = \sqrt{x}$
 $0 \leq x < \infty$

$f(x) = \text{rule, domain} \dots$



$\frac{1}{x}$
 $(-\infty, 0) \cup$
 $(0, \infty)$

Functions (pt of inflection)

Vert line \pm \leftarrow
horiz line \pm \leftarrow
Zeros \leftarrow
line of symmetry \leftarrow
vertex \leftarrow
concavity \leftarrow
x-int \leftarrow
maximum \leftarrow
y-int \leftarrow
minimum \leftarrow
Domain \leftarrow
Range \leftarrow
Asymptotes \leftarrow
increasing \leftarrow
decreasing \leftarrow

Inverses

$f(x)$ and $g(x)$ are
inverse functions IF:

① $f(g(x)) = x$
for every x in the domain of g

② $g(f(x)) = x$
for every x in the domain of f

And then we write

$$g(x) = f^{-1}(x)$$

